

### **REMARKS**

By this amendment, claims 1 and 14 have been amended. Accordingly, claims 1-25 are currently pending in the application, of which claims 1 and 14 are independent claims. Claims 26-33 have been previously withdrawn.

Applicants respectfully submit that the above amendments do not add new matter to the application and are fully supported by the specification. Support for the amendments may be found at least at page 8, lines 3-19 the specification.

In view of the above amendments and the following Remarks, Applicants respectfully request reconsideration and timely withdrawal of the pending objections and rejections for the reasons discussed below.

#### ***Claim Objection***

In the Office Action, claims 1 and 14 were objected to as not being described in the specification.

Applicants respectfully submit that support for claims 1 and 14 may be found at least at page 7, line 20 – page 8, line 2 of the specification. The porous silica material of the present invention does not inherently possess the property of staying transparent before and after absorption of moisture. The present invention makes a mixture comprising a polymer binder and SiO<sub>2</sub> nano particles dispersed in the polymer binder, coats the mixture at a front substrate, and fires the polymer binder during a thermal process to produce pores between the particles in order to use the moisture absorption layer in the front substrate. As a result, the moisture absorption layer of the present invention provides the porous material layer including particles of nano-size without the polymer, and remains transparent even before and after the layer absorbs moisture. Accordingly, Applicants respectfully request withdrawal of the objection for claims 1 and 14.

***Rejections Under 35 U.S.C. § 103***

Claims 1-25 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over U.S. Patent No. 6,803,127 issued to Su, *et al.* ("Su"), U.S. Patent No. 6,791,256 issued to Nishizawa, *et al.* ("Nishizawa"), U.S. Patent No. 5,321,102 issued to Loy *et al.* ("Loy") and further in view of U. S. Patent No. 6,762,553 issued to Yokogawa, *et al.* ("Yokogawa").

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Third, the reference or references, when combined, must disclose or suggest all of the claim limitations. The motivation to modify the prior art and the reasonable expectation of success must both be found in the prior art and not based upon a patent applicant's disclosure. *See in re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The examiner has failed to establish a *prima facie* case of obviousness.

First, there is no suggestion or motivation to modify Su, Nishizawa, or Loy in view of Yokogawa. Su discloses an organic electroluminescent device with drying layers 50I and 50II (Fig. 3). Nishizawa discloses a display device with "a dehumidifying agent and/or free-oxygen absorber kneaded with a material of rubber GS" (col. 13, lines 34-36). Loy teaches a silica desiccant (col. 2, lines 6-10). However, Yokogawa discloses a silica aerogel which has hydrophobic properties. Hence, "[I]t is difficult for moisture or water to go into the inside of the silica aerogel material" (col. 11, lines 44-46). Unlike Su, Nishizawa, and Loy which teach an element that absorbs or attracts moisture, Yokogawa teaches a silica aerogel that repels moisture. Therefore, it would not have been obvious to one of ordinary skill in the art to turn to the teachings of Yokogawa when seeking to modify Su, Nishizawa, or Loy.

Second, even if combined, the combined references do not disclose or suggest all of the claim limitations. Claim 1 recites, *inter alia*:

a transparent moisture-absorbing layer comprising a porous material layer coated directly on the internal surface of the front substrate, wherein the porous material layer consists of a transparent material without a polymer adapted to transmit light emitted by the organic electroluminescent portion to the front substrate and to absorb moisture and to remain transparent even after absorption of moisture, and wherein the porous material layer is formed by coating a mixture comprising a silica on the internal surface of the front substrate and firing the mixture on the front substrate

The Office Action relies upon Yokogawa and Loy to cure the deficiencies of Su and Nishizawa regarding the transparent moisture-absorbing layer. However, Yokogawa and Loy fail to teach or suggest each and every feature of claim 1, more particularly, Yokogawa and Loy fail to teach a transparent material adapted "to absorb moisture and to remain transparent even after absorption of moisture". Yokogawa teaches a transparent porous silica (col. 10, lines 4-5), and Loy teaches a silica desiccant (col. 2, lines 6-10). Yet, neither Yokogawa nor Loy teach or suggest that the silica remains transparent after the absorption of moisture. In relying upon the theory of inherency, the Examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the prior art. *Ex parte Tanksley*, 37 USPQ2d 1382, 1385 (Bd. Pat. App. & Int'l 1994). Applicants respectfully submit that the Examiner has failed to meet such a burden of illustrating the claimed limitations are inherent in Yokogawa or Loy.

Similarly, Su, Nishizawa, Loy, and Yokogawa fail to teach or suggest each and every feature of claim 14.

Accordingly, Applicants respectfully request withdrawal of the 35 U.S.C. § 103(a) rejection of claims 1 and 14. Claims 2-13 and 15-25 depend from claims 1 or 14, respectively, and are allowable at least for this reason. Since none of the other prior art of record, whether taken alone or in any combination, discloses or suggests all the features of the claimed invention, Applicants respectfully submit that independent claims 1 and 14, and all the claims that depend therefrom, are allowable.

Claim 1 stands rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over U.S. Patent No. 6,800,350 issued to Van Hal, *et al.* ("Van Hal"), Nishizawa and further in view of U. S. Patent No. 6,709,806 issued to Hotta, *et al.* ("Hotta").

The examiner has failed to establish a prima facie case of obviousness. Assuming *arguendo* that the references may be combined and a reasonable expectation of success exists, the combined references do not disclose or suggest all of the claim limitations.

Claim 1 recites, *inter alia*:

a transparent moisture-absorbing layer comprising a porous material layer coated directly on the internal surface of the front substrate, wherein the porous material layer consists of a transparent material without a polymer adapted to transmit light emitted by the organic electroluminescent portion to the front substrate and to absorb moisture and to remain transparent even after absorption of moisture, and wherein the porous material layer is formed by coating a mixture comprising a silica on the internal surface of the front substrate and firing the mixture on the front substrate

The Office Action relies upon Hotta to cure the deficiencies of Van Hal and Nishizawa regarding the transparent moisture-absorbing layer. However, Hotta fails to cure the deficiencies of Van Hal and Nishizawa. More specifically, Hotta fails to teach a transparent material adapted "to absorb moisture and to remain transparent even after absorption of moisture". Hotta teaches a silica aerogel (col. 11, lines 39-43) but fails to teach that the silica remains transparent after the absorption of moisture. In relying upon the theory of inherency, the Examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the prior art. *Ex parte Tanksley*, 37 USPQ2d 1382, 1385 (Bd. Pat. App. & Int'l 1994). Applicants respectfully submit that the Examiner has failed to meet such a burden of illustrating the claimed limitations are inherent in Hotta. Furthermore, Hotta is in connection with a Printed Circuit Board having a porous substrate on which a fine conductive pattern is formed. In Hotta,

a transparent porous substrate is needed to undergo an exposure process. Therefore, Hotta is not in connection with the present invention.

Accordingly, Applicants respectfully request withdrawal of the 35 U.S.C. § 103(a) rejection of claim 1. Claims 2-13 depend from claim 1 and are allowable at least for this reason. Since none of the other prior art of record, whether taken alone or in any combination, discloses or suggests all the features of the claimed invention, Applicants respectfully submit that independent claim 1, and all the claims that depend therefrom, are allowable.

**CONCLUSION**

Applicants believe that a full and complete response has been made to the pending Office Action and respectfully submit that all of the stated objections and grounds for rejection have been overcome or rendered moot. Accordingly, Applicants respectfully submit that all pending claims are allowable and that the application is in condition for allowance.

Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact Applicants' undersigned representative at the number below to expedite prosecution.

Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully submitted,

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Date: May 7, 2007

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